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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TANG, KENNETH

ART UNIT	PAPER NUMBER
2195	

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/681,930	Applicant(s) PABLA ET AL.	
	Examiner Kenneth Tang	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the Amendment filed on 2/21/06. Applicant's arguments has been fully considered but are moot in view of the new grounds of rejections.
2. Claims 1-15 and 17-18 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-15 and 17-18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al. (hereinafter Atkinson) (US 2002/0012329 A1) in view of Weinberger et al. (hereinafter Weinberger) (US 6,813,777 B1).**

4. As to claim 18, Atkinson teaches a multi-tier system for providing vendor-neutral communication to mobile devices (*page 3, [0023]*) comprising:

a client device having a virtual machine capable of processing device-independent applications (*page 2, [0020]*),

a plurality of servers providing a plurality of services to said client device in the form of said device-independent applications (device independent because of device platform independent) (*[0050], [0020], [0022], [0024], [0028], [0030], [0097]*);

a gateway for preprocessing (instantiation, etc.) communications between said client device and said plurality of servers thereby reducing processing requirements on said client device (processing memory requirements are reduced because of instantiation) (*page 1, [0012] through page 2, [0013], [0103]*);

a plurality of peer-to-peer communication layers between said plurality of servers and said client device through said gateway, said gateway providing protocol translation between said plurality of servers and said client device, wherein said preprocessing communications includes transforming (converting) any content (*page 6, [0051], page 2, [0021], [0013], [0031]*);

a manager object in said client device for managing said device-independent applications (*page 3, [0024], page 5, [0050], claim 9*)

5. Atkinson fails to explicitly teach each of said device-independent applications having a plurality of states, wherein said plurality of states comprises an initialization state, a background state, a foreground state, a destroy state, and a paused (or inactive) state in addition to logic for creating a registry in the first tier that includes a table of each of said at least one application object class and wherein the registry includes an application object class ID for each of said at least one application object class, with logic to switch between background and foreground states.

6. However, Weinberger teaches remote and portable device that provides switching activity of application between a foreground and background state of an interface using a registry table of identified object classes (*col. 132, lines 46-52, col. 51, lines 43-50, col. 52, lines 35-40, see Abstract, etc.*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of using a hand held

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portable device that provides switching between a foreground and background state of an interface in order to gain the advantage of conserving processing power by placing inactive applications in the foreground until it is required, where switching to the background will then occur (*col. 5, lines 12-20*).

7. In addition, Weinberger fails to explicitly teach an initialization (start) state, a destroy (end) state, and a paused state. However, "Official Notice" is taken that both the concept and advantages of providing that an initialization (start) state, a destroy (end) state, and a paused state is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an initialization (start) state, a destroy (end) state, and a paused state to the existing system and method of Atkinson and Weinberger because these are simply the controls that allow for the switching between the background and foreground. Without such controls, the switching would not be able to occur.

8. As to claim 17, it is rejected for the same reasons as stated in the rejection of claim 18 above. In addition, Atkinson teaches a framework for the mobile devices (*page 5, [0050], page 12, [0102], page 13, [0104]*).

As to claim 1, it is rejected for the same reasons as stated in the rejection of claim 18 above. In addition, Atkinson teaches a framework for the mobile devices (*page 5, [0050], page 12, [0102], page 13, [0104]*).

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9. As to claim 2, Atkinson teaches wherein said plurality of peer-to-peer layers comprises: at least one physical data link layer, a network layer, a transport layer, a session layer, a presentation layer; and an applications layer (*page 1, [0012], pages 1-2, [0013], page 2, [0020] and [0022], page 3, [0025] and [0027], page 4, [0034]*).
10. As to claim 3, Atkinson teaches wherein said at least one physical data link layer comprises landline communication between said third tier and said second tier, and wireless communication between said second tier and said first tier (*page 5, [0050], page 6, [0051], page 2, [0021]*).
11. As to claim 4, Atkinson teaches wherein said network layer uses Internet Protocol communication between said third tier and said second tier, and wireless applications protocol between said second tier and said first tier (*page 5, [0050], page 6, [0051], page 2, [0021], page 3, [0025]*).
12. As to claim 5, Atkinson teaches wherein said transport layer uses transport control protocol between said third tier and said second tier, and wireless applications protocol between said second tier and said first tier (*page 5, [0050], page 6, [0051], page 2, [0021], page 3, [0025]*).
13. As to claim 6, Atkinson teaches wherein said session layer uses hypertext transport protocol between said third tier and said second tier and amongst services in

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said third tier, and wireless applications protocol between said second tier and said first tier (*page 5, [0050], page 6, [0051], page 2, [0021], page 3, [0025]*).

14. As to claim 7, Atkinson teaches wherein said presentation layer uses a markup language between said third tier and said second tier, and a wireless markup language between said second tier and said first tier (*page 3, [0025]*).

15. As to claim 8, Atkinson teaches wherein said application layer prepares graphical data for presentation, said graphical data being available in any suitable graphical format and communicated from said third tier to said second tier, said second tier converting said graphical data to a wireless graphics format for transmission to said first tier (*pages 12-13, [0102]*).

16. As to claim 9, Atkinson teaches wherein said first tier is a wireless device (*page 1-2, [0013]*).

17. As to claim 10, Atkinson teaches wherein said wireless device is a cellular phone (*page 1, [0003]*).

18. As to claim 11, Atkinson teaches wherein said wireless device is a personal data assistant (*page 1, [0003]*).

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19. As to claim 12, Atkinson teaches wherein said wireless device includes a software architecture comprising a real-time operating system layer, a virtual machine layer having at least one system class, an application layer (*page 2, [0016] and [0020], page 3, [0027]*).

20. As to claim 13, Atkinson teaches wherein said real-time operating system layer comprises a wireless small device operating system, a plurality of linking and networking application programming interfaces, and an object for updating and installing software in said wireless device (*page 1, [0004], page 3, [0023], page 5, [0050], page 6, [0051], page 2, [0021], page 3, [0025]*).

21. As to claim 14, it is rejected for the same reasons as stated in the rejections of claims 1 and 18.

22. As to claim 15, it is rejected for the same reasons as stated in the rejections of claim 18.

Response to Arguments

23. Applicant's arguments have been fully considered but are moot in view of the new grounds of rejections.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

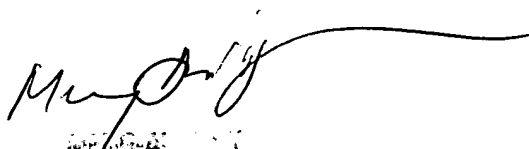
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kt
6/28/06


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